

**PATENT/Docket No. PC10299A**

Appl. No. 09/489,711

Filing Date: January 24, 2000

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**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-16 (Cancelled)

17. (Currently amended) A vaccine composition comprising:

- (1) an antigen composition; and,
- (2) an adjuvant composition,

wherein the antigen composition comprises a fluid fraction of an *E. rhusiopathiae* culture and a stabilizing agent, wherein said *E. rhusiopathiae* culture is inactivated with beta-propiolactone and said fluid fraction is substantially free of cells of *E. rhusiopathiae*; wherein the stabilizing agent is a metal hydroxide, a metal phosphate, an aluminum hydroxide gel, a calcium phosphate gel, a zinc hydroxide/calcium hydroxide gel or an alum, and wherein the adjuvant composition comprises about 2% v/v lecithin, about 18% v/v mineral oil, and a combined volume of about 8% v/v of Tween 80-polyoxyethylene sorbitan mono-oleate and Span 80-sorbitan mono-oleate surfactants with the remaining volume being a saline solution, wherein said vaccine composition protects an animal against *E. rhusiopathiae* infection.

18-25. (Cancelled)

26. (Previously presented) The vaccine composition of Claim 17, wherein said stabilizing agent is aluminum hydroxide gel.

27. (Currently amended) The vaccine composition of Claim 41, wherein said stabilizing agent, aluminum hydroxide gel, is added to the concentrated antigen composition to a final concentration of 30% v/v.

28-29. (Cancelled)

30. (Currently amended) A vaccine composition comprising:

- (1) an antigen composition; and,
- (2) an adjuvant composition,

wherein the antigen composition comprises a fluid fraction of an *E. rhusiopathiae* culture and a stabilizing agent, wherein the stabilizing agent is aluminum hydroxide gel and is present at about 30% v/v in said vaccine composition; wherein the *E. rhusiopathiae* culture is

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inactivated with beta-propiolactone and said fluid fraction is substantially free of cells of *E. rhusiopathiae*; and wherein the adjuvant composition comprises about 2% v/v lecithin, about 18% v/v mineral oil, and a combined volume of about 8% v/v of Tween 80-polyoxyethylene sorbitan mono-oleate and Span 80-sorbitan mono-oleate surfactants with the remaining volume being a saline solution, wherein said vaccine composition protects an animal against *E. rhusiopathiae* infection.

31. (Previously presented) The vaccine composition of Claim 17 or 30, wherein said composition is stable at 2°C to 8°C for at least one year and protects weaned pigs against *E. rhusiopathiae* infection for six months.

32. (Currently amended) The-A vaccine composition of Claim 17 or 30, comprising:

(1) an antigen composition; and,

(2) an adjuvant composition,

wherein the antigen composition comprises a fluid fraction of an *E. rhusiopathiae* culture and a stabilizing agent, wherein said *E. rhusiopathiae* culture is inactivated with formalin and said fluid fraction is substantially free of cells of *E. rhusiopathiae*; wherein the stabilizing agent is a metal hydroxide, a metal phosphate, an aluminum hydroxide gel, a calcium phosphate gel, a zinc hydroxide/calcium hydroxide gel or an alum, and wherein the adjuvant composition comprises about 2% v/v lecithin, about 18% v/v mineral oil, and a combined volume of about 8% v/v of polyoxyethylene sorbitan mono-oleate and sorbitan mono-oleate surfactants with the remaining volume being a saline solution, wherein said vaccine composition protects an animal against *E. rhusiopathiae* infection.

33-39. (Cancelled)

40. (Previously presented) The antigen composition of Claim 17, wherein the fluid fraction is concentrated 6 to 20 fold, resulting in a concentrated antigen composition.

41. (Previously presented) The vaccine composition of Claim 40, wherein said stabilizing agent is aluminum hydroxide gel.

42. (New) A vaccine composition comprising:

(1) an antigen composition; and,

(2) an adjuvant composition,

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wherein the antigen composition comprises a fluid fraction of an *E. rhusiopathiae* culture and a stabilizing agent, wherein the stabilizing agent is aluminum hydroxide gel and is present at about 30% v/v in said vaccine composition; wherein the *E. rhusiopathiae* culture is inactivated with formalin and said fluid fraction is substantially free of cells of *E. rhusiopathiae*; and wherein the adjuvant composition comprises about 2% v/v lecithin, about 18% v/v mineral oil, and a combined volume of about 8% v/v of polyoxyethylene sorbitan mono-oleate and sorbitan mono-oleate surfactants with the remaining volume being a saline solution, wherein said vaccine composition protects an animal against *E. rhusiopathiae* infection.

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